

PATENT ABSTRACTS OF JAPAN

(11) Publication number : **11-105538**

(43) Date of publication of application : **20.04.1999**

(51) Int.CI.

B60H 1/32

F01P 3/18

F28D 1/053

(21) Application number : **09-268913**

(71) Applicant : **DENSO CORP
TOYOTA MOTOR CORP**

(22) Date of filing : **01.10.1997**

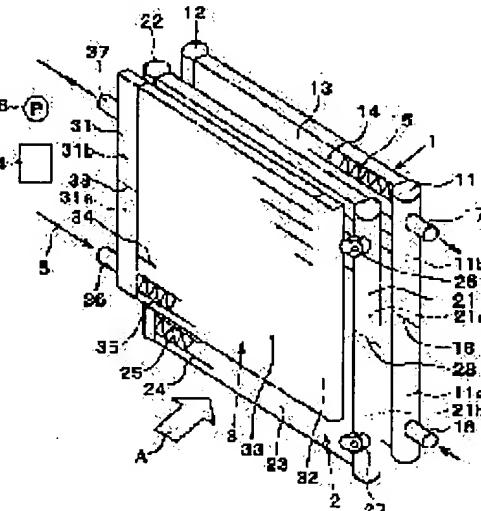
(72) Inventor : **NAKAMURA HIROTAKA
MURAKI TOSHIHIKO
NONOYAMA KOJI
MATSUNO TAKAMITSU
SUZAKI SHUNKICHI**

(54) HEAT EXCHANGER FOR VEHICLE

(57) Abstract:

PROBLEM TO BE SOLVED: To restrict deterioration of performance of a cooling medium condenser in a heat exchanger for a vehicle in which an auxiliary cooling radiator for a heat generating device is mounted on the cooling air upstream side of the cooling medium condenser.

SOLUTION: For a cooling medium condenser 2, a position so an auxiliary radiator 3 is set in such a way that a part of a cooling medium exit side zone without overlapping with the auxiliary radiator 3 is formed. In the cooling medium exit side zone in which cooling medium temperature becomes the lowest in the cooling medium condenser 2, therefore, cooling air of low temperature without passing the auxiliary radiator 3 (without heat-absorbed by the auxiliary radiator 3) can be fed to flow. Temperature difference between cooling medium and cooling air can thus be sufficiently secured in the cooling medium exit side zone of the cooling medium condenser 2 even when outer air is at high temperature, and thereby deterioration of performance of the cooling medium condenser 2 can be restricted.



LEGAL STATUS

[Date of request for examination] 20.06.2000
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number] 3324464
[Date of registration] 05.07.2002
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office